

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPELLANT: Apps et al. ART UNIT: 3637
SERIAL NO.: 09/439,427 EXAMINER: Jose Chen
FILED: 11/15/1999
FOR: PLASTIC PALLET

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

APPEAL BRIEF

Subsequent to the Notice of Appeal filed with the Patent and Trademark Office on November 22, 2006, Appellant now submits its Brief.

REAL PARTY IN INTEREST

The real party in interest Rehrig Pacific Company is the Assignee of all right and title in this Application from the inventors, and this assignment was recorded on July 21, 1998 at Reel/Frame 09351/0356.

RELATED APPEALS AND INTERFERENCES

This application was previously appealed, in Appeal No. 2002-1675. The Decision affirming the Examiner on other grounds pursuant to 37 CFR § 1.196(b), is in the Appendix.

STATUS OF CLAIMS

Claims 22, 24-28, 30-33, 36 and 38-54 are presently pending in the application and stand finally rejected. The rejections of claims 22-54 is being appealed. Claims 1-21 have been cancelled. The status of claims 23, 29, 34, 35 and 37 is unclear.

STATUS OF AMENDMENTS

There was no Amendment After Final.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention relates to plastic pallets. Pallets are used to support goods above the ground so that they can be lifted with a fork lift. Pallets include a top deck having an upper surface with columns or supports supporting the top deck above the ground. The pallet may further include a lower deck, with the columns extending between the top deck and the lower deck.

One problem with some plastic pallets is that their surfaces tend to be slippery. Measures must be taken to prevent the load from sliding off the pallet; to keep stacked pallets, whether loaded or not, from sliding off one another; and to keep the pallets from sliding off the forks of the fork lift. Common anti-slip measures involve the use of anti-slip coatings or rubber inserts, such as pads or grommets, placed in strategic locations. One problem with these anti-slip measures is that they require the installation of additional parts or materials. Further, anti-slip coatings can wear away, while inserts can work loose and fall off during use.

As claimed in claim 22, the present invention provides 22 a synthetic resin pallet having upper and lower decks spaced apart by a plurality of supports to define therebetween fork-receiving regions beneath the upper deck. Claim 22 is a product-by-process claim, which recites a pallet made by mechanically scuffing a top surface of the upper deck, a bottom surface of the lower deck, and an underside of the upper deck in the fork-receiving regions to create scuffs forming a slip-resistant scuffed texture thereon.

Claim 26 recites plastic pallet including a first deck and a second deck spaced apart from each other by a plurality of support members extending therebetween and defining fork-receiving regions. Claim 26 is a product-by-process claim that requires that the pallet is made by scuffing an outer surface of the first deck and an inner surface of the first deck in the fork-receiving regions to define a plurality of slip-resistance scuffed surfaces.

Claim 31 recites a first deck and a second deck spaced apart from each other by a plurality of support members to define fork-receiving regions therebetween. Claim 31 is a product-by-process claim that the pallet is made by scuffing an upper surface of the first deck and a lower surface of the second deck to define a plurality of slip-resistance scuffed surfaces.

Claim 39 recites a pallet having at least one deck member. Claim 39 is a product-by-process claim requiring molding a single material to form the at least one deck member having a first major surface of the single material and a second surface. Claim 39 also requires that the pallet is made by mechanically scuffing the first major surface of the deck member to create scuffs which define a slip resistant surface thereon.

Claim 44 recites a synthetic resin pallet having upper and lower decks spaced apart by a plurality of supports to define therebetween fork-receiving regions beneath the upper deck. Claim 44 is a product-by-process claim reciting the pallet made by a method comprising mechanically scuffing at least one of the top surface of the upper deck, the bottom surface of the lower deck, and the underside of the upper deck in the fork-receiving regions to create a slip-resistant scuffed texture.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Appellant seeks review of the following grounds of rejection:

- I. Claims 22, 24-28, 30-33, 36 and 38 have been rejected as anticipated by Wyler (US 5,868,080).
- II. Claims 39-54 have been rejected as obvious over Wyler in view of Anderson (US RE29,192).

ARGUMENTS

I. The rejection of claims 22, 24-28, 30-33, 36 and 38 as anticipated by Wyler (US 5,868,080) should be reversed.

Wyler discloses a pallet having a plastic pallet body 12 with a single top deck 14. Channels 30 are formed in the top deck 14 to accommodate reinforcing bars 32. The reinforcing bars fiberglass reinforced plastic fabricated from a pultrusion process. (col. 4, lines 29-32). “The exposed surface 34 of each reinforcing bar 32 preferably comprises an integral anti-skid surface 36, formed e.g. by knurling or roughening, and/or with anti-skid material. The anti-skid surface 36 serves to limit payload movement on the upper surface 20 of pallet 10.” (col. 4, lines 17-19). The anti-skid material is disclosed as a silicon oxide and epoxy mixture that is applied to the selected surfaces of the reinforcing bars. (col. 4, lines 32-36).

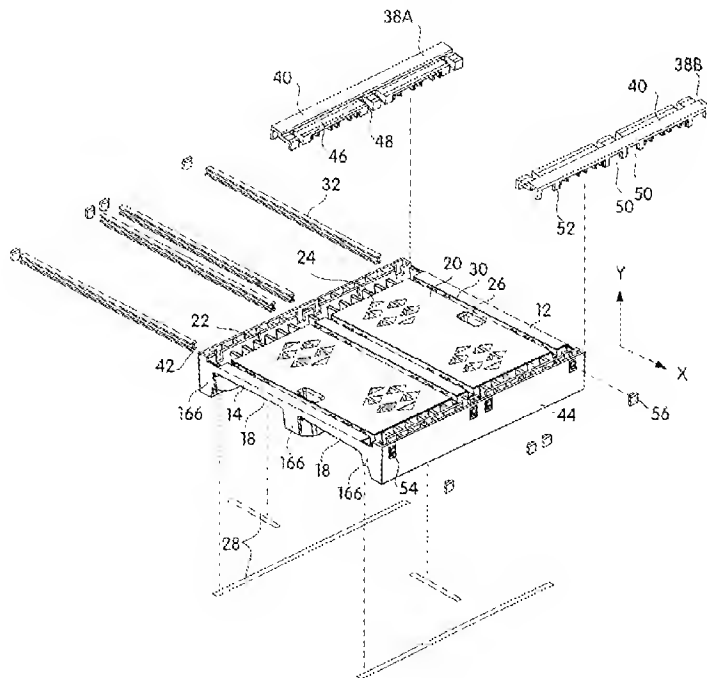


Fig. 1

These claims include product-by-process limitations. It appears that the Examiner is not using the right legal standard. The product-by-process limitations cannot be simply ignored. As the Board of Appeals has already indicated in this application, if the product made by the claimed process is different from the prior art product, the claim is not anticipated. (Board of Appeals Decision, November 21, 2002, footnote 1 (See Appendix).) Therefore, the only question here is

whether Wyler's disclosure of "an integral anti-skid surface 36, formed e.g. by knurling or roughening..." is different from a claimed product resulting from the process of "mechanically scuffing" or "scuffing."

As shown by the Declaration of William P. Apps, the claimed "scuffed" surface is distinguishable from the Wyler surface. The Wyler surface would have a bumpy, shiny surface, while the claimed scuffed surface would have a smooth, yet dull surface with visible scuff marks. Since the product produced by the claimed surface is different from the Wyler product, Wyler does not anticipate these claims. The Declaration is sufficient because it shows that the product made by the product-by-process step (scuffing) would be distinguishable on examination from the Wyler prior art pallet, which is sufficient under the proper legal standard.

Claims 24, 25, 27, 28, 32, 33 and 38 are independently patentable

Claims 24, 25, 27, 28, 32, 33, and 38 all require "brushing...with at least one wire brush." None of the cited references disclose forming a pallet that would be equivalent to having been brushed by at least one wire brush. As indicated in the Declaration of William P. Apps, the wire brush provides visible scuff marks from the wires of the brush. This is distinguishable from the Wyler surface.

II. The Rejection of Claims 39-54 over Wyler in view of Anderson (US RE29,192) should be reversed.

The Examiner proposes to modify the Wyler pallet to have a single material (i.e. eliminate the reinforcing bars). This modification of Wyler is impossible. If the pallet of Wyler were modified to include only a single material, it would also be modified to *eliminate* the reinforcing bars. But since the Wyler reinforcing bars provide the "roughened or knurled surfaces," eliminating the reinforcing bars would also eliminate the "roughened or knurled surfaces," upon which the Examiner relies for the rejection. In short, Wyler cannot be modified to be made of a single material without also eliminating the "roughened or knurled surfaces." For this reason, claims 39-54 are patentable.

CLOSING

For the reasons set forth above, the final rejection of all claims is improper and should be reversed.

Respectfully submitted,

/John E. Carlson/

John E. Carlson, Reg. No. 37,794
Carlson, Gaskey & Olds PC
400 W. Maple Rd., Suite 350
Birmingham, MI 48009
(248) 988-8685

Dated: May 22, 2007

CLAIMS APPENDIX

22. A synthetic resin pallet, for use with a fork lift, having upper and lower decks spaced apart by a plurality of supports to define therebetween fork-receiving regions beneath the upper deck, the pallet made by a method comprising:

- (a) separately molding the upper and lower decks of synthetic resin;
- (b) mechanically scuffing a top surface of the upper deck, a bottom surface of the lower deck, and an underside of the upper deck in the fork-receiving regions to create scuffs forming a slip-resistant scuffed texture thereon; and
- (c) assembling the decks to form a finished pallet.

23. The pallet according to claim 22 wherein scuffing comprises scuffing said surfaces to create a multi-directional scuffing pattern.

24. The pallet according to claim 22 wherein scuffing comprises brushing said surfaces with at least one wire brush.

25. The pallet according to claim 22 wherein scuffing includes brushing said surfaces with at least one cup-shaped wire brush.

26. A plastic pallet adapted for use with a fork member of a lift device, the plastic pallet including a first deck and a second deck spaced apart from each other by a plurality of support members extending therebetween and defining fork-receiving regions, the pallet prepared by a method comprising:

- providing the first deck and the second deck separately from each other;
- scuffing an outer surface of the first deck and an inner surface of the first deck in the fork-receiving regions to define a plurality of slip-resistance scuffed surfaces; and
- assembling the first deck and the second deck to define the plastic pallet.

27. The pallet according to claim 26, wherein scuffing includes brushing the surfaces with at least one wire brush.

28. The pallet according to claim 26, wherein scuffing includes brushing the surfaces with at least one cup-shaped wire brush.

29. The pallet according to claim 26, wherein scuffing includes scuffing the surfaces to define a multi-directional scuffing pattern.

30. The pallet according to claim 26, wherein scuffing further includes scuffing an outer surface of the second deck.

31. A plastic pallet for use with a fork member of a lift device, the plastic pallet having a first deck and a second deck spaced apart from each other by a plurality of support members to define fork-receiving regions therebetween, the pallet formed by a method comprising:

separately providing the first deck and the second deck;
scuffing an upper surface of the first deck and a lower surface of the second deck to define a plurality of slip-resistance scuffed surfaces; and
assembling the first deck and the second deck to define the plastic pallet.

32. The pallet according to claim 31, wherein scuffing includes brushing the surfaces with at least one wire brush.

33. The pallet according to claim 31, wherein scuffing includes brushing the surfaces with at least one cup-shaped wire brush.

34. The pallet according to claim 31, wherein scuffing includes scuffing the surfaces to define a multi-directional scuffing pattern.

35. The pallet according to claim 31, wherein scuffing further includes scuffing the inner surface of the first deck in the fork-receiving region.

36. A pallet having at least one deck member, the pallet prepared by a method comprising:

providing the at least one deck member having a first surface and a second surface; and
mechanically scuffing at least one of the first and second surfaces of the deck member to define a slip-resistant surface thereon.

37. The pallet of claim 36, wherein scuffing includes scuffing the at least one surface to create a multi-directional scuffing pattern.

38. The pallet of claim 36, wherein scuffing includes brushing the at least one surface with at least one wire brush.

39. A pallet having at least one deck member, the pallet prepared by a method comprising:

molding a single material to form the at least one deck member having a first major surface of the single material and a second surface; and

mechanically scuffing the first major surface of the deck member to create scuffs which define a slip-resistant surface thereon.

40. The pallet of claim 39, wherein scuffing includes scuffing the first major surface to create a multi-directional scuffing pattern.

41. The pallet of claim 40, wherein scuffing includes brushing the first major surface with at least one wire brush.

42. The pallet of claim 39 wherein the first major surface is a major surface of the pallet.

43. The pallet of claim 39 wherein the pallet has a load-contacting surface and wherein the first major surface comprises the entire load-contacting surface of the pallet.

44. A synthetic resin pallet, for use with a fork lift, having upper and lower decks spaced apart by a plurality of supports to define therebetween fork-receiving regions beneath the upper deck, the pallet made by a method comprising:

(a) separately injection-molding the upper and lower decks of synthetic resin to form a top surface of the upper deck, a bottom surface of the lower deck, and an underside of the upper deck in the fork-receiving regions;

(b) mechanically scuffing at least one of the top surface of the upper deck, the bottom surface of the lower deck, and the underside of the upper deck in the fork-receiving regions to create a slip-resistant scuffed texture; and

(c) assembling the decks to form a finished pallet.

45. The pallet according to claim 44 wherein said step (c) is performed after said step (b).

46. The pallet according to claim 44 wherein said step (b) comprises scuffing the top surface of the upper deck, the bottom surface of the lower deck and the underside of the upper deck in the fork-receiving regions to create multi-directional scuffing patterns.

47. The pallet according to claim 46 wherein scuffing comprises brushing said surfaces with at least one wire brush.

48. The pallet according to claim 47 wherein scuffing includes brushing said surfaces with at least one rotating cup-shaped wire brush.

49. The pallet of claim 44 wherein the top surface of the upper deck is a major surface of the pallet and wherein said step (b) includes the step of mechanically scuffing the top surface of the upper deck.

50. The pallet of claim 44 wherein the pallet has a load-contacting surface and wherein the top surface of the upper deck comprises the entire load-contacting surface of the pallet and wherein said step (b) includes the step of mechanically scuffing the top surface of the upper deck.

51. The pallet of claim 44 wherein said step (a) further includes the step of injection-molding one of the upper and lower decks to include a plurality of supports and the other of the upper and lower decks to include a plurality of recesses for receiving the plurality of supports and wherein said step (b) includes the step of mechanically scuffing the top surface of the upper deck.

52. The pallet of claim 39 wherein the first major surface is smooth.

53. The pallet of claim 52 wherein the first major surface is dull.

54. The pallet of claim 52 wherein the first major surface is a load-contacting surface of the pallet.

55. The pallet of claim 54 wherein the scuffing pattern is a multi-directional scuffing pattern.

EVIDENCE APPENDIX

The Declaration of William P. Apps, one of the inventors, follows.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: William P. Apps, et al.

GROUP ART UNIT: 3636

APPEAL NO: 2002-1675

SERIAL NO.: 09/439,427

EXAMINER: Wilkens, J.

FILING DATE: 11/15/1999

FOR: Plastic Pallet

DOCKET NO.: RPC 0491 PUS

**Assistant Commissioner of Patents
Washington, D.C. 20231**

DECLARATION UNDER 37 CFR § 1.132

I, William P. Apps, state as follows:

1) I am one of the named inventors in the above-referenced patent application. I have a bachelor's degree in mechanical engineering and approximately 20 years of experience in the design and manufacture of plastic products for the material handling industry, including plastic pallets. I am one of skill in the art of designing plastic pallets such as those in the present application and I am generally familiar with those of ordinary skill in the art.

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this DECLARATION UNDER 37 CFR § 1.132 is being sent via facsimile to Group Art Unit 3636, Examiner Janet Wilkens, facsimile number 703-872-9327 on January 21, 2003.



Konstantine J. Diamond

2) In our above-referenced patent application, we describe our process of “mechanically scuffing” the deck surface of the pallet. After injection-molding, the outermost layer of the polymer initially tends to be slippery, as ascertained by its generally “shiny” appearance. The mechanical scuffing process that we claim is a surface operation which removes the shine and slipperiness from the outermost surface of the polymer deck surface. Because it is only a surface operation, no protrusions or bumps are formed on the mechanically scuffed surface, yet the mechanically scuffed surface is less slippery. The mechanically scuffed surface is identifiable by its smooth, yet dull surface and the scuff marks, which are visible on the deck surface.

3) We prefer a multi-directional scuffing pattern on the deck surface in our invention. The multi-directional scuffing pattern provides anti-skid properties in each direction on the deck surface. The multi-directional scuffing pattern is visible on the surface of the deck.

4) We prefer to use a wire brush to scuff the deck surface, which provides visible scuff marks from the wires of the brush. In particular, we use a rotating cup-shaped wire brush, which provides relatively uniform, multi-directional scuffing patterns on the deck surface.

5) I have reviewed U.S. Patent No. 5,868,080 to Wyler et al. Wyler describes a pallet body 12 comprising a “unitary structure molded from...high density polyethylene.” Reinforcing bars 32 are inserted into channels in the pallet body for reinforcement. The reinforcing bars in Wyler are described as made of fiberglass reinforced plastic fabricated from a pultrusion process. Wyler describes that an exposed surface 34 of each reinforcing bar preferably comprises “an integral anti-skid surface 36, formed e.g. by knurling or roughening.”

6) One of skill in the art would know that it is generally considered undesirable to expose the fibers of a fiberglass composite structure made in a pultrusion process. It is generally known in the art that the fiberglass composite structure should not be subject to removing material or “mechanically scuffing” the surface. This would be particularly true of a “reinforcing bar” whose purpose is to provide strength and rigidity to a load-bearing surface of the pallet. Therefore, one of skill in the art would not interpret the “knurling” or “roughening” comment in the Wyler patent to include mechanical scuffing or scuffing with a wire brush, or any other sort of process that would expose or damage the fiberglass fibers by removing even the outermost layer of polymer.

7) One of ordinary skill in the art would generally interpret “knurling” process to mean that the surface is provided with a series of small ridges or protrusions, either by molding in the protrusions or by removing material to form the protrusions or ridges. However, since Wyler’s reinforcing bars are a fiberglass composite made in a pultrusion process, one of skill in the art would understand the “knurling” comment to mean the ridges or protrusions are molded into the surface. For the reasons stated above, those in the art would know not to remove material from the fiberglass composite structure. However, either form of “knurling” (removing material or molding) is very different from the claimed process of “mechanically scuffing” which is a surface operation that removes the shine and slipperiness from the outermost surface of the polymer and does not form ridges or protrusions. Therefore, a molded polymer surface that has been “mechanically scuffed” is readily visibly and tactilely distinguishable from a molded polymer that has been knurled.

8) Wyler also mentions “roughening” the surface of the reinforcing bars. The description of Wyler is certainly insufficient to lead anyone of ordinary skill in the art to mechanically scuffing the surface or mechanically scuffing the surface with a wire brush. Since “roughening” is mentioned along with “knurling,” one might understand the “roughening” to be protrusions or ridges that are molded into the surface. Again, those of skill would know not to remove material, even the outermost surface, from a fiberglass composite structure. Therefore, one of skill would again assume that the “roughening”

process was molding ridges or protrusions into the surface of the reinforcing bars. The ridges or protrusions molded onto the surface would be visibly different and tactilely different from a mechanically scuffed polymer surface.

9) I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: _____

1/21/03

Signed: _____


William P. Apps

RELATED PROCEEDINGS APPENDIX

The Decision affirming the Examiner on other grounds pursuant to 37 CFR § 1.196(b) follows.

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

09/20/02

Ex parte WILLIAM P. APPS, JEFF WILKERSON
and BRIAN MUSSER

PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Appeal No. 2002-1675
Application No. 09/439,427

ON BRIEF

Before STAAB, McQUADE, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 22 to 38, which are all of the claims pending in this application.

We AFFIRM with the affirmance constituting new grounds of rejection under 37 CFR § 1.196(b).

BACKGROUND

The appellants' invention relates to a pallet made of synthetic resin for use with a fork lift (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Sturgis	2,599,076	June 3, 1952
Fingerson	4,522,009	June 11, 1985
Pigott et al. (Pigott)	5,197,395	Mar. 30, 1993
Wyler et al. (Wyler)	5,868,080	Feb. 9, 1999

Claims 22, 23, 26, 29 to 31 and 34 to 37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Pigott in view of Wyler and Fingerson.

Claims 24, 25, 27, 28, 32, 33 and 38 stand rejected under 35 U.S.C. § 103 as being unpatentable over Pigott in view of Wyler, Fingerson and Sturgis.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 13, mailed August 22, 2001) for the examiner's complete reasoning in

support of the rejections, and to the brief (Paper No. 12, filed June 1, 2001) and reply brief (Paper No. 14, filed January 7, 2002) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

In the brief (p. 3), the appellants stated that claims 22, 23, 26, 29 to 31 and 34 to 37 stand or fall together and that claims 24, 25, 27, 28, 32, 33 and 38 stand or fall together. In accordance with 37 CFR § 1.192(c)(7), we have selected claims 36 and 38 as the representative claims from the appellants' above-noted grouping of claims to decide the appeal on the rejections under 35 U.S.C. § 103. Accordingly, claims 22, 23, 26, 29 to 31, 34, 35 and 37 will stand or fall with claim 36 and claims 24, 25, 27, 28, 32 and 33 will stand or fall with claim 38.

Claim 36

We sustain the rejection of claim 36 under 35 U.S.C. § 103.

Claim 36¹ reads as follows:

A pallet having at least one deck member, the pallet prepared by a method comprising:
 providing the at least one deck member having a first surface and a second surface; and
 mechanically scuffing at least one of the first and second surfaces of the deck member to define a slip-resistant surface thereon.

Pigott's invention relates generally to pallets useful in material handling and more particularly to molded plastic pallets designed for use with forklift equipment. As shown in Figures 1-4, a plastic pallet 10 includes two identical decks 12 that are interconnected by identical connectors 14. Each connector includes a central core 20 and a surrounding sleeve 44 interconnected by spokes 46. The core has flexible tangs 28 that extend beyond opposite ends of the sleeve and lock onto the deck.

Fingerson's invention relates to a flooring grating wherein the bearing members of the grating are retained in a predetermined-spaced relationship by interconnecting

¹ Claim 36 is a product-by-process claim. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Once the appellants have been provided with a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to the appellants to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. See In re Marosi, 710 F.2d 799, 803, 218 USPQ 289, 292-93 (Fed. Cir. 1983).

members including cooperating key rod members and lock rod members adhesively bonded together. As shown in Figures 1-3, the flooring grating 10 includes a plurality of spaced, generally parallel flooring members 12 also referred to as support members or bearing members. The flooring members 12 are connected together in a grating construction by a plurality of interconnecting structures 14. The interconnecting structures 14 include a central core member 16, or key rod adhesively bonded to two outer spacer members 18, or lock rods, by a suitable, flexible adhesive 19. The flooring members 12 include a base portion 20, a web portion 22 and an upper flange portion 24. Each of the flooring members 12 has a plurality of apertures 26 extending transversely therethrough. Each of the interconnecting structures 14 extends through sets of the apertures 26 in the web portion 22 of the flooring members 12 which are in relative alignment. Fingerson teaches (column 6, lines 5-8) that the upper surface of the upper flange portions 24 may be roughened or coated with another material so as to provide an increased gripping surface for the flooring grating.

Wyler's invention relates in general to pallets for storing and transporting goods, and more particularly, to a reinforced plastic pallet and fabrication method wherein reinforcing members comprising composite structural members of fiberglass reinforced

plastic are employed in various configurations. In the Disclosure of Invention section of the patent (column 1, line 56, to column 2, line 52), Wyler provides

Briefly summarized, the invention comprises in one aspect a reinforced plastic pallet having a molded plastic pallet body with at least one channel formed in an upper surface thereof. At least one reinforcing bar is provided sized to reside within the channel formed in the upper surface of the molded plastic pallet body such that the reinforcing bar has an exposed surface at the upper surface of the molded plastic pallet body. Preferably, the exposed surface of the reinforcing bar comprises an anti-skid surface to inhibit movement of payload disposed on the reinforced plastic pallet. The reinforcing bar may comprise a composite structural member of fiberglass reinforced plastic fabricated from a pultrusion process.

In another aspect, the invention comprises a reinforced plastic pallet having a molded plastic body with at least one channel formed in a lower surface thereof and at least one reinforcing bar sized to reside within the at least one channel. The reinforcing bar has an exposed surface at the lower surface of the molded plastic pallet body when the bar is positioned within the at least one channel. Preferably, the exposed surface of the at least one reinforcing bar comprises an anti-skid surface for engagement with a forklift tine and/or pallet jack interface.

...

In a further aspect, a reinforced plastic pallet is provided wherein a molded plastic top deck and a molded plastic bottom deck are secured together. The molded plastic bottom deck has at least one channel formed in a lower surface thereof. At least one reinforcing bar is sized to reside within the at least one channel formed in the lower surface of the bottom deck such that the reinforcing bar has an exposed surface at the lower surface of the bottom deck. Preferably, the exposed surface comprises an anti-skid surface for ensuring non-slip contact with a floor or racking structure.

...

Provided herein are various implementations of an improved reinforced plastic pallet and method of assembly. The plastic pallet includes multiple reinforcing bars, preferably fabricated of fiberglass reinforced plastic produced

from a pultrusion or molding process. Advantageously, a surface of each reinforcing bar can remain exposed above an upper surface of a single or dual deck pallet design to provide an anti-skid surface for payload disposed on the pallet. Reinforcing bars could also or alternatively be disposed to provide an exposed surface on the underside of the payload surface, again to establish an anti-skid surface in combination with providing structural support for the pallet. This anti-skid surface would be engaged by forklift tines and/or a pallet jack interface/handling mechanism to prevent slippage of the pallet when being moved. Reinforcing bars can also be disposed at a lower surface of a runner structure or lower deck so that an exposed anti-skid surface is provided to contact a floor or racking structure, for example, to facilitate use of the pallet with automated warehouse handling equipment.

Figure 1 of Wyler presents an exploded view of a reinforced plastic pallet 10.

Pallet 10 includes a generally rectangular-shaped molded plastic pallet body 12 with a single top deck 14 supported by three runners or leg structures 16a, 16b, and 16c. The runners extend parallel to a short or Y axis and define parallel recesses 18 on the underside of pallet 12 for receiving, for example, forklift tines to facilitate pallet handling. Deck 14 may be provided with various patterns of supporting ribs 22, drainage holes 24 and/or hand holds 26. Pallet body 12 preferably comprises a unitary structure molded from recycled and/or virgin commodity plastic, e.g., high density polyethylene using a structural foam or injection molding process or other known forming process. Bottom side anti-skid strips 28, of known construction, can be adhered or otherwise secured along the lengths of runners 16a and 16c and across recesses 18, as shown in order to reduce skidding of pallet 10 on a supporting surface and/or forklift tines.

The upper surface 20 of Wyler's deck 14 is provided with multiple parallel channels 30 extending along the long or X-axis. Channels 30 are formed as part of the molding process and are configured to receive and support corresponding reinforcing bars 32. Reinforcing bars 32 comprise elongated structural members made of composite material such as fiberglass reinforced plastic fabricated from a pultrusion process. Reinforcing bars 32 have an exposed generally planar top surface 34 which is substantially parallel to and, preferably, coplanar or slightly elevated with respect to upper surface 20 of deck 14. Wyler teaches (column 4, lines 16-20) that the exposed surface 34 of each reinforcing bar 32 preferably comprises an integral anti-skid surface 36, formed e.g., by knurling or roughening, and/or with anti-skid material. The anti-skid surface 36 serves to limit payload movement on the upper surface 20 of pallet 10.

Wyler further teaches (column 5, lines 36-61) that

The composite reinforcing bars of the present invention which provide not only increased integrity and strength to the plastic pallet but also enhanced anti-skid properties can be mounted in various locations in the pallet body depending upon the desired application. FIGS. 7A-7F illustrate three different scenarios for single deck and dual deck pallets. When it is desired to limit movement of a load on top of the pallet (Scenario 1), reinforcing bars 32 can advantageously be mounted in upper surface 20 of top deck 14 of either a single deck (FIG. 7A) or dual deck (FIG. 7D) pallet. To limit movement of the pallet upon forklift tines or at a pallet jack interface (Scenario 2), reinforcing bars 32 can be mounted in pallet body 16 so that the anti-skid surface of the bars is exposed at a lower surface 66 of top deck 14, in either a single deck (FIG. 7B) or a dual deck (FIG. 7E) pallet. To reduce movement of the pallet on a floor surface (Scenario 3), e.g. a metal floor of a moving vehicle, reinforcing bars 32 can be mounted at the lower surface of runners 16 in a single deck pallet (FIG. 7C) or

the lower surface of a bottom deck 68 of a dual deck pallet (FIG. 7F) so that the anti-skid surface of the bars 32 rest on the floor surface. Such reinforcing bars with their exposed anti-skid surfaces can also be concurrently applied to multiple surfaces of the pallet, i.e. upper surface 20 of top deck 14, lower surface 66 of top deck 14, and/or lower surface 70 of runner 16 or bottom deck 68.

Figure 12 of Wyler shows a reinforcing bar 32 having an exposed anti-skid surface 36 mounted to the underside 66 of a top deck 14 in a dual deck pallet 10'. Bottom deck 68 is secured to the lower side 66 of top deck 14 using legs 72. Legs 72 also sandwich and serve to retain reinforcing bars 32 in their desired location on the underside of top deck 14. Bottom deck 68 and legs 72 may comprise a single unitary runner structure which is secured over a portion of each reinforcing bar 32 trapping the reinforcing bars between the top deck 14 and the runner structure.

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Pigott and claim 36, it is our opinion that the difference is that Pigott's pallet does not have a deck member in which at least one of the surfaces of the deck member is mechanically scuffed to define a slip-resistant surface thereon.

Based on our analysis and review of Wyler and claim 36, it is our opinion that there is no difference. In our view claim 36 is readable on² Wyler as follows:

A pallet (Wyler's pallet 10) having at least one deck member (either one of Wyler's reinforcing bars 32 or Wyler's deck 14 and reinforcing bars 32 taken together), the pallet prepared by a method comprising: providing the at least one deck member having a first surface and a second surface (Wyler's reinforcing bar 32 has a top surface 34 and a bottom surface); and mechanically scuffing at least one of the first and second surfaces of the deck member to define a slip-resistant surface thereon (Wyler's top surface 34 of reinforcing bar 32 is an anti-skid surface 36 formed by roughening or knurling).

The only possible distinction between Wyler and claim 36 is the limitation that at least one of the first and second surfaces of the deck member is mechanically scuffed to define a slip-resistant surface thereon. It is our view this limitation is not restricted to mechanically scuffing either the entire upper or lower surface of the deck member (e.g.,

² A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984), it is only necessary for the claims to "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

Wyler's upper surface 20 of deck 14). Instead, this limitation requires only that any surface of a deck member of a pallet be mechanically scuffed to define a slip-resistant surface thereon. Since Wyler's top surface 34 of reinforcing bar 32 of pallet 10 is roughened or knurled to form an anti-skid surface 36, it is our view that the subject matter of claim 36 is met by Wyler.

For the reasons set forth above, we have concluded that Wyler teaches all the limitations of claim 36. A disclosure that anticipates under 35 U.S.C. § 102 also renders the claim unpatentable under 35 U.S.C. § 103, for "anticipation is the epitome of obviousness." Jones v. Hardy, 727 F.2d 1524, 1529, 220 USPQ 1021, 1025 (Fed. Cir. 1984). See also In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982); In re Pearson, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974). Accordingly, the decision of the examiner to reject claim 36 under 35 U.S.C. § 103 is affirmed.

In accordance with 37 CFR § 1.192(c)(7) and the appellants' grouping of claims 22, 23, 26, 29 to 31 and 34 to 37, claims 22, 23, 26, 29 to 31, 34, 35 and 37 fall with claim 36. Thus, it follows that the decision of the examiner to reject claims 22, 23, 26, 29 to 31, 34, 35 and 37 under 35 U.S.C. § 103 is also affirmed.

Inasmuch as the basic thrust of our affirmance of the 35 U.S.C. § 103 rejection of claims 22, 23, 26, 29 to 31 and 34 to 37 differs from the rationale advanced by the examiner for the rejection, we hereby designate the affirmance to be a new ground of rejection pursuant to 37 CFR § 1.196(b) to allow the appellants a fair opportunity to react thereto (see In re Kronig, 539 F.2d 1300, 1302-03, 190 USPQ 425, 426-27 (CCPA 1976)).

Claim 38

We sustain the rejection of claim 38 under 35 U.S.C. § 103.

Claim 38 reads as follows:

The pallet of claim 36, wherein scuffing includes brushing the at least one surface with at least one wire brush.

It is our determination that these method of making limitations do not affect the product itself (i.e., the claimed pallet) and therefore cannot impart patentability to the product. See In re Thorpe, supra. Thus, the subject matter of claim 38 is anticipated by Wyler for the reasons set forth above with respect to parent claim 36. Since the appellants have now been provided with a rationale tending to show that the claimed product appears to be the same as that of the prior art, although produced by a different process, the burden has shifted to the appellants to come forward with

evidence establishing a difference between the claimed product and the prior art product. See In re Marosi, supra. This the appellants have not yet done.

For the reasons set forth above, the decision of the examiner to reject claim 38 under 35 U.S.C. § 103 is affirmed. In accordance with 37 CFR § 1.192(c)(7) and the appellants' grouping of claims 24, 25, 27, 28, 32, 33 and 38, claims 24, 25, 27, 28, 32 and 33 fall with claim 38. Thus, it follows that the decision of the examiner to reject claims 24, 25, 27, 28, 32 and 33 under 35 U.S.C. § 103 is also affirmed.

Inasmuch as the basic thrust of our affirmance of the 35 U.S.C. § 103 rejection of claims 24, 25, 27, 28, 32, 33 and 38 differs from the rationale advanced by the examiner for the rejection, we hereby designate the affirmance to be a new ground of rejection pursuant to 37 CFR § 1.196(b) to allow the appellants a fair opportunity to react thereto.

CONCLUSION

To summarize, the decision of the examiner to reject claims 22 to 38 under 35 U.S.C. § 103 is affirmed with the affirmance constituting a new ground of rejection under 37 CFR § 1.196(b).

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b). 37 CFR § 1.196(b) provides that, "[a] new ground of rejection shall not be considered final for purposes of judicial review."

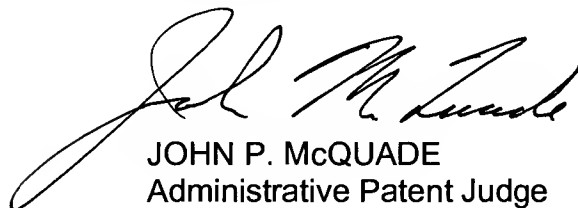
37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

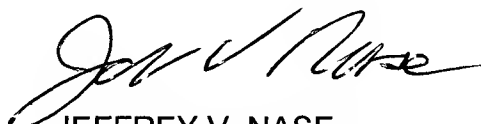
- (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
- (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal
may be extended under 37 CFR § 1.136(a).

AFFIRMED; 37 CFR § 1.196(b)


LAWRENCE J. STAAB
Administrative Patent Judge


JOHN P. McQUADE
Administrative Patent Judge


JEFFREY V. NASE
Administrative Patent Judge

)
)
)
)
)
) BOARD OF PATENT
) APPEALS
) AND
) INTERFERENCES
)
)
)
)
)

Appeal No. 2002-1675
Application No. 09/439,427

Page 16

BROOKS & KUSHMAN P C
1000 TOWN CENTER 22ND FL
SOUTHFIELD, MI 48075-1351

JVN/jg